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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,157	04/04/2001	John J. Hart III	E00366/70005 JNA	4012

23628 7590 06/30/2005

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EXAMINER	
PYZOCHA, MICHAEL J	

ART UNIT	PAPER NUMBER
2137	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/826,157	HART ET AL.	
	Examiner	Art Unit	
	Michael Pyzocha	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 June 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *112-118 and 120-143* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *112-118 and 120-143* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 112-118 and 120-149 are pending

Specification

2. The newly submitted abstract is accepted.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 117-118, 120-121, 134-139 and 143 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. In claim 117 it is unclear if the term "time/frequency" is relating to "time and frequency," "time or frequency," or "time and/or frequency." It will be assumed to mean "time or frequency" for the purposes of examination for prior art.

6. Claims 134-139 depend from claim 132 and recite the limitation "The computer-readable media" and claim 132 is a method, which renders these claims indefinite. It appears claims 134-139 should depend from claims 133.

7. Any claims not specifically addressed are rejected by virtue of their dependencies.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 133-139 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 133-139 relate to the arrangement of data on a computer readable medium, which does not constitute statutory material under 35 USC 101.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 112, 115-118, 122-123, 126-143 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koch et al ("Towards

Robust Hidden Image Copyright Labeling"), further in view of Senoh (US 6240121), and further in view of Girod et al (US 5809139).

As per claims 112, 133, 140, Koch et al discloses selecting a plurality of placement locations (see page 2 last paragraph).

Koch et al fails to disclose randomly selecting a plurality of number to frequency modulation relationships.

However, Senoh teaches randomly selecting a plurality of number to frequency modulation relationships (see column 2 lines 28-44).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use Senoh's method of randomly selecting number to frequency relationships in the method of Koch et al.

Motivation to do so would have been to make it difficult to detect the watermark data (see column 4 lines 31-48).

The modified Koch et al and Senoh system fails to disclose frequency modulating at least portion of the title data at each of the plurality of placement location with a modulation derived by applying one of the plurality of number to frequency modulation relationships to the identification data.

However, Girod et al teaches frequency modulating title data with identification data (see abstract).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use Girod et al's method modulating data with the modified Koch et al and Senoh system.

Motivation to do so would have been to allow watermarking of pre-compressed data (see abstract).

As per claim 115-116, the modified Koch et al, Senoh and Girod et al system discloses decoding at least portion of the audio title data (see Senoh column 6 lines 18-26).

As per claim 117, the modified Koch et al, Senoh and Girod et al system discloses the selecting step includes scanning the audio title data to determine the plurality of locations where one of a frequency deviation between channels of audio title data is less than a predetermined frequency deviation and time intervals within the audio title data for the time-frequency modulating the audio title data where the time/frequency modulation of the audio title data is not discernible to a human ear (see Koch et al page 2).

As per claim 118, the modified Koch et al, Senoh and Girod et al system discloses the step of selecting includes randomly selecting the plurality of placement locations from the plurality of placement locations (see Koch et al page 2).

As per claims 122-123, the modified Koch et al, Senoh and Girod et al system discloses encoding watermarked audio title data and combining watermarked title data with the remainder of the audio title data (see Girod et al column 3 lines 1-15).

As per claim 126, 135-136, Official Notice is taken that it would have been obvious at the time of the invention to on skilled in the art to burn a selected medium with the watermarked title data. Motivation to do so would have been to allow for the distribution of the watermarked data.

As per claim 127, the modified Koch et al, Senoh and Girod et al system discloses transmitting the data to a customer (see Girod et al figure 1).

As per claim 128, the modified Koch et al, Senoh and Girod et al system discloses receiving a decryption key and decrypting encrypted title data to provide the title data (see Koch et al page 2).

As per claim 129, the modified Koch et al, Senoh and Girod et al system discloses the step of decoding encoded title data to provide the title data (see Girod et al column 3 lines 1-15).

As per claims 130-132, the modified Koch et al, Senoh and Girod et al discloses selecting an entry of a set of relationships (see Senoh column 2 lines 28-44).

As per claim 134, the modified Koch et al, Senoh and Girod et al system discloses the modulated data is not perceptible to a human listener (see Senoh column 4 liens 32-48).

As per claim 137, the modified Koch et al, Senoh and Girod et al system discloses transmitting the data over a network (see Girod et al column 4 lines 35-50).

As per claim 138, the modified Koch et al, Senoh and Girod et al system discloses the plurality of locations are random (see Koch et al page 2).

As per claim 139, the modified Koch et al, Senoh and Girod et al system discloses the modulation schemes are random (see Senoh column 2 lines 28-44).

As per claims 141-143, the modified Koch et al, Senoh and Girod et al discloses receiving a decryption key and decrypting the encrypted title data to provide the title data (see Girod et al column 3 lines 1-15).

12. Claims 113-114 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Koch et al, Senoh and Girod et al system as applied to claim 112 above, and further in view of Mizikovsky (U.S. 5,748,734).

As per claim 113, the modified Koch et al, Senoh and Girod et al system discloses generating a watermarking key that is a combination of the customer identification data, and the

randomly selected frequency modulation and number relationship (see Koch et al page 2).

The modified Koch et al, Senoh and Girod et al system fails to disclose storing the watermarking key in a secure database.

However, Mizikovsky teaches storing a key in a secure database (see column 7 lines 57-67).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to store the modified Koch et al, Senoh and Girod et al system's key in the secure database of Mizikovsky.

Motivation to do so would have been to allow for the verification of the key (see Mizikovsky column 6 line 57 through column 7 line 13).

As per claim 114, the modified Koch et al, Senoh, Girod et al, and Mizikovsky system discloses the step of generation the watermarking key includes generating a unique watermark key for each watermarked title data (see Koch et al page 2).

13. Claims 120-121 and 125 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Koch et al, Senoh and Girod et al system as applied to claims 112, 117 above, and further in view of Miller (US 6263087).

As per claims 120-121 and 125, the modified Koch et al, Senoh and Girod et al system fails to disclose the use of a

reference and watermarked channel and decoding the watermark using the reference channel.

However, Miller teaches such channels (see column 2 lines 15-38).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use Miller's channels in the modified watermarking system of Koch et al, Senoh and Girod et al.

Motivation to do so would have been to use correlations and thresholds to decode the watermark (see column 2 lines 15-38).

14. Claim 124 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Koch et al, Senoh and Girod et al system as applied to claim 116 above, and further in view of Davis et al (US 6611607).

As per claim 124, the modified Koch et al, Senoh and Girod et al system fails to disclose combining the audio and video data together.

However, Davis et al teaches combining audio and video together (see column 1 lines 55 through column 2 line 10).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the audio of the modified Koch et al, Senoh and Girod et al system with the video of Davis et al. Motivation to do so would have been to

control the processing of the combined multimedia signal (see Davis et al column 1 lines 55-65).

Response to Arguments

15. Applicant's arguments with respect to claims 112-118 and 120-129 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pyzocha whose telephone number is (571) 272-3875. The examiner can normally be reached on 7:00am - 4:30pm first Fridays of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJP

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